

# CHAPTER 4

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## Cumulative Impacts

### 4.1 CEQA Analysis Requirements

A cumulative impact is created as a result of the combination of the project evaluated in an EIR together with other projects causing related impacts. The *CEQA Guidelines* require that EIRs discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects.<sup>1</sup> According to *CEQA Guidelines* §15130(a) and (b), the purpose of this section is to provide a discussion of significant cumulative impacts which reflects "the severity of the impacts and their likelihood of occurrence." The *CEQA Guidelines* indicate that the discussion of cumulative impacts should include:

- Either: (A), a list of past, present, and probable future projects producing related or cumulative impacts; or (B), a summary of projections contained in an adopted general plan or similar document, or in an adopted or certified environmental document, which described or evaluated conditions contributing to a cumulative impact;
- A discussion of the geographic scope of the area affected by the cumulative effect;
- A summary of expected environmental effects to be produced by these projects; and,
- Reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

The analysis of cumulative effects in this chapter focuses on the effects of concurrent construction of the proposed project with other spatially and temporally proximate projects. As such this analysis relies on a list of projects that have the potential to contribute to cumulative impacts in the project area.

### 4.2 Related Projects

This analysis considers the impacts of Perris Dam Remediation Program in combination with potential environmental effects of other projects in the project area. "Other projects," also referred to as "cumulative projects" include recently completed projects, projects currently under construction, and future projects currently in development. The potential for projects to have a cumulative impact depends on both geographic location as well as project schedule.

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<sup>1</sup> *CEQA Guidelines* Section 15130, 15065, as amended January 1, 2000.

### 4.2.1 Geographic Scope

The geographic area affected by cumulative projects varies depending on the environmental topic. For example, construction noise impacts would be limited to areas directly affected by construction noise, whereas the area affected by a project's air emissions generally includes the entire air basin, and impacts associated with aesthetics would include the affected viewshed.

The proposed project is located in Western Riverside County. The majority of the project would occur within the unincorporated area of the County near the City of Perris and the City of Moreno Valley. A portion of the proposed emergency outlet extension would be located in the City of Perris. This chapter considers the potential cumulative effects of the project in combination with development projects occurring in these areas and in the wider scope of coverage, including the Cities of Perris and Moreno Valley.

### 4.2.2 Project Timing

As noted above, projects considered in this analysis include those that have recently been completed, are currently under construction, or are in planning. Schedule is particularly relevant to the consideration of cumulative construction-related impacts, since construction impacts tend to be relatively short-term. However, for future projects, construction schedules are often broadly estimated and can be subject to change. Although the timing of the future projects described in Section 4.2.4 are likely to fluctuate due to schedule changes or other unknown factors, this analysis assumes these projects would be implemented concurrently with construction of the Perris Dam Remediation Program, between 2010 and 2013.

### 4.2.3 Type of Projects Considered

As described in Chapter 3 of this EIR, the majority of impacts associated with implementation of the proposed project are short-term and related to construction, rather than long-term project operation. Therefore, the project could contribute to cumulative effects when considered in combination with impacts of other construction projects in the project area. For this analysis, other past, present, and reasonably-foreseeable future construction projects, particularly other infrastructure and commercial projects, in the area have been identified. Long-term cumulative impacts of the project in conjunction with the other projects in the area are assessed as well.

### 4.2.4 Description of Cumulative Projects

**Table 4-1** lists current and proposed projects that could potentially contribute to cumulative impacts within the project area. In addition to the projects listed in Table 4-1, additional development that has not been identified as of this time, could occur within the project area, as planned by the County of Riverside, and nearby Cities.

**TABLE 4-1  
PLANNED AND APPROVED PROJECTS IN THE PROJECT AREA**

<b>Planning Jurisdiction</b>	<b>Project</b>	<b>Project Status / Construction Dates</b>	<b>Location</b>
City of Perris	WF Construction, Inc. 80,890 sq. ft. concrete tilt up.	Submitted July 2008; not yet approved.	Webster Avenue, south of Morgan Street
City of Perris	Revision of the Downtown Specific Plan	Submitted August 2008; not yet approved.	City of Perris
City of Perris	North Perris Commerce Specific Plan	Submitted October 2008; not yet approved.	City of Perris
City of Perris	TM Calandra, President. 484,000 sq. ft. industrial building.	Submitted November 2008; not yet approved.	Webster Avenue & Ramona Expressway
City of Perris	Roy P.Sweeney. 12,200 sq. ft. multi-tenant building.	Approved April 2009	2560 N Perris Boulevard, Lot E.
City of Perris	Roy P.Sweeney. 10,000 sq. ft. multi-tenant building.	Submitted December 2008; not yet approved.	2560 N Perris Boulevard, Lot L
City of Perris	Initial Study for Perris Valley Storm Channel	Completed in March 2009; currently under review.	Perris Valley Storm Channel
City of Perris	Recyclewise. Construction of a recycling collection facility in GI zone.	Submitted March 2009; currently under review.	2282 Goetz Road
City of Perris	Perris Valley Airport Land Use Plan	Submitted April 2009; currently under review.	Perris Valley Airport
City of Perris	Cesar Madrid of C & D Homes, Inc. 35 lots for multi-family development.	Submitted for review July 2007; status unknown.	Northwest corner of Alpine Drive and A Street
City of Perris	Oakmont Ramona Expressway, LLC. Construction of 5 industrial buildings totaling 3,008,000 sq. ft. Oakmont II	Submitted for review July 2007; status unknown.	Ramona Expressway at Indian Avenue.
City of Perris	Dave Wakefield of Nuevo Road Partners, II, LLC. Construction of 55,987 sq. ft. retail center with drive thru for fast food and retail.	Submitted for review July 2007; status unknown.	Old Nuevo Road east of I-215.
City of Perris	Dave Wakefield of Nuevo Road Partners, II, LLC. Construction of 4 buildings totaling 18,515 sq. ft. retail center with drive thru for fast food and retail.	Submitted for review July 2007; status unknown.	Old Nuevo Road east of I-215.
City of Perris	EMWD. 33,000 sq. ft. addition.	Approved September 2007.	2270 Trumble Road
City of Perris	RMC, LLC. Construction of 6 light industrial buildings for a total of 46,790 sq. ft.	Submitted for review September 2007; status unknown.	Southeast corner of 7th Street and G Street.
City of Perris	Stratford Ranch Investors, LLC. Development of 442,000 sq. ft. of commercial space for a Target Store.	Submitted September 2007; status unknown.	Northeast corner of Ramona Expressway and Evans Road.
City of Perris	WLPX Perris Venue, LLC. 63.74 acre commercial site to be developed to 621,000 sq. ft. retail space including Target Store.	Submitted for review September 2007; status unknown.	Redlands Avenue and I-215.
City of Perris	Dr & Mrs. Hong Ling Lee. 16,517 sq. ft. retail building with drive thru.	Submitted for review November 2007; status unknown.	Southeast corner of Perris Boulevard and Rider Street

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<b>Planning Jurisdiction</b>	<b>Project</b>	<b>Project Status / Construction Dates</b>	<b>Location</b>
City of Perris	Weekend Warrior Mfg. Redevelop a 14.34 ± acre site to add 16,400 sq. ft. of building space and 66,900 sq. ft. of canopy.	Submitted for review December 2007; status unknown.	804 S. Redlands Avenue
City of Perris	FR Goetz Rd., LLC. Preliminary review for four buildings totaling 3,306,917 sq. ft. on 205 acres.	Approved January 2008.	Southwest corner of Mapes Street and Goetz Street.
City of Perris	Matt Englhard, FR/Cal Ellis, LLC. Construction of four industrial buildings totaling 9,452,520 sq. ft. in the New Perris Specific Plan.	Submitted January 2008; status unknown.	Northeast corner of Ellis Street and Redlands Avenue.
City of Perris	Ivano Stamegna. Preliminary review for 6 unit apartment complex on .45 acres.	Approved March 2008.	Northeast corner of Flame Avenue and Medical Center Drive.
City of Perris	John Pulliam. Operation of a soil and ground water remediation system for up to 3 years.	Approved March 2008.	1535 Nandina Avenue
City of Perris	12,200 square-foot multi-tenant building.	Approved April 2009.	2560 N Perris Blvd
City of Perris	10,000 square-foot multi-tenant building.	Pending, 2008+	2560 N Perris Blvd
City of Moreno Valley	Moreno Valley Mall at TowneGate. Updating and repositioning of the 1.2 million sq. ft. regional mall.	300,000 sq. ft. currently under development.	South of Highway 60 and east of Day Street.
City of Moreno Valley	TownGate Center and Plaza. Existing and expanding community shopping center.	Partially open and under construction	Southwest corner of Frederick Street and Highway 60.
City of Moreno Valley	TownGate Crossing. 250,000 sq. ft. shopping center.	Partially under construction	South of Highway 60 and east of Day Street. West side of Moreno Valley Mall.
City of Moreno Valley	TownGate Promenade. Expanding 353,000 sq. ft. shopping center.	Partially under construction	Southeast corner of Day Street and Campus Parkway.
City of Moreno Valley	TownGate Square. A mixed-use commercial, retail/restaurant/office development project with 136,000 sq. ft. of retail/restaurant, plus 170,000 sq. ft. of office.	Under construction.	Southeast corner of Gateway Drive and Day Street.
City of Moreno Valley	Moreno Valley Plaza. Existing community center. Major multi-phase renovation of shopping center.	Under construction	Southwest corner of Sunnymead Boulevard and Heacock Street.
City of Moreno Valley	Stoneridge Towne Centre. 579,295 sq. ft. commercial center.	Partially open and under construction	Southeast corner of Highway 60 and Nason Street.
City of Moreno Valley	Moreno Beach Plaza. Anchor includes Wal-Mart and 86,000 sq. ft. expansion.	Partially open and under construction	South of Highway 60 and west of Moreno Beach Dr.
City of Moreno Valley	Moreno Marketplace. 93,788 sq. ft. retail center/neighborhood shopping center.	Under construction	Northwest corner of Cactus and Moreno Beach.
City of Moreno Valley	Rancho Belago Plaza. 14,000 sq. ft. retail/commercial center.	Approved and in plan check	Southwest corner of JFK and Moreno Beach Drive

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City of Moreno Valley	Iris Plaza. 109,289 sq. ft. retail commercial center.	Under construction	Southeast corner of Perris and Iris.
City of Moreno Valley	N&R Square. 13,000 sq. ft. retail center.	Under construction	Perris Boulevard south of Alessandro Boulevard
City of Moreno Valley	Sunnymead and Indian. Two building commercial development totaling 19,360 sq. ft.	Approved	Sunnymead Boulevard west of Indian Avenue
City of Moreno Valley	Elsworth Plaza, Three new buildings with a total of 30,000 sq. ft.	Under construction	Southwest corner of Alessandro and Elsworth.
City of Moreno Valley	Alessandro and Lasselle. 140,000 sq. ft. retail center	In planning phase	Northeast corner of Alessandro Boulevard and Lasselle Boulevard
City of Moreno Valley	Alessandro and Lasselle. Mixed-use residential/commercial project with 96 residential units and 11,000 sq. ft. of commercial	In planning phase	Northwest corner of Alessandro Boulevard and Lasselle Boulevard.
City of Moreno Valley	Alessandro and Moreno Beach. 36,000 sq. ft. retail center.	In planning phase	Southwest corner of Alessandro and Moreno Beach.
City of Moreno Valley	Alessandro and Moreno Beach. 15,150 sq. ft. retail/office space	Approved	Southeast corner of Alessandro and Moreno Beach.
City of Moreno Valley	Komar Cactus Plaza. 81,000 sq. ft. mixed-use retail/restaurant project with 110-hotel guest rooms, two drive-thru restaurants 12,220 sq. ft. of restaurant	In planning phase	Northeast corner of Cactus Avenue and Commerce Center Drive
City of Moreno Valley	Pigeon Pass and Hemlock. 13,140 sq. ft. retail center on 1.02 acres.	In planning phase	Pigeon Pass and Hemlock.
City of Moreno Valley	Tesco – “Fresh and Easy Neighborhood Market (several locations).	Frederick and Cottonwood – Opening soon Iris and Oliver – Approved Perris and Iris – Opening soon	Several locations: Frederick and Cottonwood; Iris and Oliver; Perris and Iris.
City of Moreno Valley	Hawthorn Inn & Suites. Four-story hotel with 79 guest rooms	Approved	Cactus Avenue and Elsworth Boulevard
City of Moreno Valley	Frederick and Sunnymead. 29,699 sq. ft. hotel with 58 guest rooms	Under construction	Frederick and Sunnymead.
City of Moreno Valley	Marriott TownePlace Suites. Four-story hotel with 110 guest rooms	In planning phase	Komar Cactus Plaza
City of Moreno Valley	Sleep Inn Suites. Three-story hotel with 74 guest rooms	In planning phase	Olivewood Plaza Drive
City of Moreno Valley	Value Place. Four-story extended stay hotel with 113 guest rooms and 41,189 sq. ft.	In planning phase	Northwest corner of Sunnymead Boulevard and Heacock Avenue

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City of Moreno Valley	Towngate Promenade. Hampton Inn and Suites with 115 guest rooms.	Hampton Inn and Suites – open	Hampton Inn and Suites – Southwest corner of Town Circle and Memorial Way
	Ayres Suites, hotel with 127 guest rooms.	Ayres Suites – under construction	Ayres Suites – Northwest corner of Gateway Drive and Memorial Way
City of Moreno Valley	Cresta Bella. Mixed-use project with 30,000 sq. ft. of medical office condominium space	In planning phase	On Iris east of Moreno Valley Community Hospital.
City of Moreno Valley	Jacobs Mixed Use. 10-acre mixed-use project with 48,000 sq. ft. office/retail plus 80,000 sq. ft. self-storage.	Under construction	Southwest corner of Graham Street and Alessandro Boulevard
City of Moreno Valley	Moreno Valley Medical Campus. 80,000 sq. ft. medical/ office /condominium complex.	Approved and in plan check	On Iris west of Moreno Valley Community Hospital.
City of Moreno Valley	Olivewood Plaza. 22,58 sq. ft. three-story office building	Approved and in plan check	North of Sunnymead Boulevard and west of Graham Street
City of Moreno Valley	Imperial Village Senior Retirement Community Center. 217,000 sq. ft. mixed-use medical complex on 18 acres	In planning phase	East of Nason Street and south of Brodiaea Avenue
City of Moreno Valley	TownGate Square. 170,000 sq. ft. of office space.	Approved	Southeast corner of Gateway Drive and Day Street
City of Moreno Valley	Alere Property Group. 407,948 sq. ft. distribution center.	In plan check	Northeast corner of Indian Street and San Michele Road.
City of Moreno Valley	Alere Property Group. 423,015 sq. ft. distribution center.	Approved and in plan check	Indian Street and San Michele Road
City of Moreno Valley	Apache Colonel Rogers Trust. 569,200 sq. ft. industrial complex with warehouse facilities.	Approved and in plan check	Unknown
City of Moreno Valley	BAS Recycling. 66,934 sq. ft. recycling plant	In plan check	Day Street south of Alessandro Boulevard.
City of Moreno Valley	Cemex Materials. Proposed concrete plant.	Approved and in plan check	Corner of Nandina Avenue and Indian Street
City of Moreno Valley	Centerpoint Business Park. 2,461,738 sq. ft. in 9 buildings.	Three building in plan check; two available for lease	Between Alessandro, Frederick, Cactus and Heacock.
City of Moreno Valley	84 Lumber Co., 56,400 sq. ft. retail/lumber storage complex on 11.04 acres	Approved and in plan check	Southeast corner of Heacock and Nandina.
City of Moreno Valley	First Industrial Realty Trust. 874,000 sq. ft. industrial/distribution facility in two buildings	Approved	North side of Nandina Avenue, west of Perris Boulevard
City of Moreno Valley	First Industrial Realty Trust. 1.1 million sq. ft. in two buildings	Approved and in plan check	North side of Nandina Avenue, between Heacock Street and Indian Street

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City of Moreno Valley	First Industrial Reality Trust, 1,491,469 sq. ft. in two buildings	Approved	Southwest corner of Indian Street and Iris Avenue
City of Moreno Valley	Gateway Business Park. 34 industrial condominiums totaling 184,036 sq. ft.	Approved and in plan check	South of Alessandro Boulevard west of Day Street
City of Moreno Valley	Highland Fairview. 1,812,107 sq. ft. commercial building	Approved and in plan check	South of Alessandro Boulevard and Theodore Street
City of Moreno Valley	Komar Investments. Proposed 1.75 million sq. ft. industrial/distribution center on 80 acres.	Approved and in plan check	North side of San Michele Road between Heacock Street and Indian Street
City of Moreno Valley	Masonry Technology, Inc. Three building industrial complex on five acres	In planning phase	Nandina Avenue east of Indian Street
City of Moreno Valley	Overton Moore: 519,716 sq. ft. industrial warehouse buildings on 25.9 acres	Approved	Northwest corner of Cactus Avenue and Frederick Street
City of Moreno Valley	Prologis. 2,224,419 sq. ft. of industrial in six buildings	In planning phase	South of SR-60 between Pettit Street and Quincy Street
City of Moreno Valley	Rados Tennants in Common. Seven industrial buildings totaling 617,127 sq. ft.	In planning phase	Northeast corner of Heacock Street and Iris Avenue
City of Moreno Valley	Ridge property Trust. 943,800 sq. ft. industrial buildings	In planning phase	South of SR-60 between Quincy Street and Redlands Boulevard
City of Moreno Valley	Robertsons Ready-Mix. Concrete plant	Approved	Old 216 Frontage Road, south of Alessandro Boulevard
City of Moreno Valley	Ross Dress for Less Distribution Center. 1.3 million sq. ft. building. 2 <sup>nd</sup> phase adding 897,000 sq. ft.	Under construction	Perris Blvd. south of Globe Street
City of Moreno Valley	Vogel Engineers Inc. 1,616,133 sq. ft. warehouse distribution center	In planning phase	North side of Oleander Storm Drain between Indian Street and Perris Boulevard
City of Moreno Valley	Western Realco. 1,582,898 sq. ft. in four buildings.	In planning phase	Southeast corner of Iris Avenue and Heacock Street
<b>MAJOR TRANSPORTATION PROJECTS</b>			
Caltrans	Interchange at I-15 and Magnolia Avenue	Construction as of June 2009. 2-yr project.	City of Corona, Riverside County
Caltrans	60/91/215 Improvements	Construction began in February 2004. Completed in December 2008	Riverside County, Moreno Valley
Caltrans	I-10 Pavement Rehabilitation	Begin Construction: April 1, 2009 End Construction: Early 2011	1-10 from County Line Road, Calimesa to Pennsylvania Road, Beaumont.

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<b>Planning Jurisdiction</b>	<b>Project</b>	<b>Project Status / Construction Dates</b>	<b>Location</b>
RCTC	I-15 Corridor Improvement Project (In conjunction with Caltrans).	Project began April 2008. Construction scheduled to begin 2015 and finish 2019.	I-15 north of the I-15/I-215 separation northward to the San Bernardino County line. Affects the Cities of Murrieta, Wildomar, Lake Elsinore, Corona, Norco and portions of unincorporated Riverside County.
RCTC	SR-79 Realignment Project	In the environmental review phase; Construction scheduled to begin 2013.	SR-79 between Domenigoni Parkway and Gilman Springs Road in the San Jacinto-Hemet area
RCTC	I-215 Widening Projects (North Project, Central Project and South Project)	In the environmental review phase for the northern and central projects. Southern project environmental review complete. Construction scheduled to begin 2010 (southern project).	<u>South Project:</u> I-215 north of Temecula to Scott Road north of Murrieta.  <u>Central Project:</u> I-215 from Scott Road north of Murrieta to Nuevo Road in Perris.  <u>North Project:</u> I-215 from Nuevo Road in Perris to SR-60 in Riverside.
RCTC	Mid County Parkway Project.	Completed Draft EIR/EIS in 2008; waiting to complete additional environmental review. Construction scheduled to begin 2012.	32-mile east-west limited access route within western Riverside County connecting the San Jacinto area with the Corona area.
RCTC	San Jacinto Branch Line Commuter Rail (Perris Valley Line) Project.	Environmental review phase complete. Construction scheduled to begin 2010.	24 mile extension of the Metrolink 91 Line beginning at the existing Riverside-Downtown Station in the City of Riverside and heading north on the BNSF Line; southeast along the San Jacinto Branch Line; terminus in the City of Perris at SR-74 and Ethanac Road in Perris.
RCTC	SR-60 Improvements (lane additions, HOV lane, connectors, truck-climbing lane, and interchange improvements).	2005-2012+	Downtown Riverside with the Ontario International Airport and Los Angeles to the west and Moreno Valley and the communities of the Pass and the Coachella Valley to the east.
RCTC	SR-74 Widening Project	Partially complete partially under construction	7th Street to "G" Street in Perris; I-15 at Dexter Avenue in Lake Elsinore to Wasson Canyon Road; Wasson Canyon Road to 7th Street in Perris.

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SANBAG	I-10 Improvements to Tippecanoe Interchange. Reconstruct Interchange and construct auxiliary lanes.	Construction scheduled to begin in 2010.	San Bernardino, near Redlands
SANBAG	1-10 High Occupancy Vehicle (HOV) Extension	In preliminary engineering, design and environmental review phases. Construction anticipated to begin in 2020.	I-10 from Haven Avenue in Ontario to Ford Street in Redlands
SANBAG	I-215 Bi-County Widening	On hold.	Widening of I-215 between 60/91/215 interchange in Riverside County and Orange Show Road interchange in San Bernardino County.
SANBAG	I-215 Bi-County HOV Gap closure	In project development stages.	Construct HOV lanes along I-215 corridor between 60/91/215 interchange in Riverside County and Orange Show Road interchange in San Bernardino County.
SANBAG	I-10 Widening (Redlands)	Construction scheduled for completion in late 2009.	Between Orange Street and Ford Street in Redlands
SANBAG	I-10 Westbound Widening	In final design phase; Construction schedules for completion in 2011.	Add one general purpose lane to westbound I-10 from Live Oaks Canyon Road in Yucaipa to Ford Street in Redlands
SANBAG	I-215 Widening (Central San Bernardino)	Final design approved in May 2009; Construction scheduled for completion in 2014.	I-215 between Rialto Avenue and Massachusetts Avenue
SANBAG	I-215 Widening (5 <sup>th</sup> Street Bridge)	Construction scheduled for completion in late 2009.	Replaces 5 <sup>th</sup> Street Bridge over I-215 and Burlington Northern Santa Fe railroad tracks.
SANBAG	I-15 and I-215 interchange improvements (Devore)	Construction scheduled for completion in 2015	1-15/I-215 interchange
SANBAG	I-215 and Barton Road – replace interchange	Construction scheduled for completion in 2015	I-215 and Barton Road
SANBAG	I-215 and Mt. Vernon Avenue/Washington Street – replace interchange	Construction scheduled for completion in 2016	I-215 and Mt. Vernon Avenue/Washington Street
SANBAG	I-215 and SR-210 High Speed Connectors	Construction scheduled for completion in 2014	Northbound I-215 to westbound SR-210; eastbound SR-210 to southbound I-215
SANBAG	State Street/University Parkway and BNSF Railroad – bridge State Street/University Parkway over BNSF Railroad	Construction scheduled for completion in June 2009	City of San Bernardino

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City of Perris	Ramona Expressway Widening	In design phase; construction scheduled to begin late Summer 2009.	East of Perris Boulevard and West of Bradley Street
City of Perris	Perris Boulevard Widening	In design phase	North of Ramona Expressway to the Moreno Valley city limits.
City of Perris	Rider Street Widening	In design phase	Between Sherman road and Avalon Street
San Bernardino County	Intersection improvement on 5 <sup>th</sup> Avenue	ROW: August 2009 Construction scheduled to begin January 2010.	Mentone
San Bernardino County	San Bernardino Avenue signal installation	Construction scheduled to begin December 2009.	Fontana
San Bernardino County	Rehab and overlay on Alabama Street	In planning phases; Construction dates unknown.	Redlands
San Bernardino County	Garnet Street Bridge Replacement	Construction scheduled to begin April 2011.	Redlands
<b>WATER AGENCY INFRASTRUCTURE PROJECTS</b>			
DWR	Phase I East Branch Extension Project EIR	Completed 2003	San Bernardino, Redlands, Mentone, Highland, Santa Ana River Wash area
DWR	Phase II East Branch Extension Project EIR	Construction scheduled to begin in 2010 and be completed in 2013	San Bernardino County, Redlands, Highland, Yucaipa, and Mentone
MWD	Inland Feeder Project	Completed 2007	Santa Ana River Wash area
San Bernardino Valley Water Conservation District (SBVWCD)	Santa Ana River Wash Land Management and HCP, aka "Wash Plan"	Completed environmental documentation in 2009. Unknown construction dates.	Santa Ana River Wash area
SBVWCD	High Groundwater Mitigation Project to increase pump and pipeline capacity, and plan for future construction of new pumps and pipelines	2007-2012+	San Bernardino, Bunker Hill Groundwater Basin
SBVMWD	North Lake Area	Unknown	82.4 acres in City of San Bernardino, immediately north of downtown
SBVMWD	South Lake Area	Unknown	53.7 acres in San Bernardino, near I-215 and Mill Street junction
San Geronimo Pass Water Agency (SGPWA)	Noble Creek in-stream recharge project of unknown capacity. Creation of recharge facilities (berms) to assist in groundwater recharge.	Finalizing permitting. Construction schedules to begin April 2010.	Beaumont, Cherry Valley

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SGPWA	Proposed EBX Extension to Cabazon	In planning phase; considering several alternatives in consideration. Construction dates unknown.	Yucaipa/Redlands to Cabazon
SGPWA	Supplemental Water Master Plan	Finalization of Draft Water Master Plan in August 2009.	Throughout SGPWA service area
City of Perris	Initial Study for Perris Valley Storm Drain Channel	Submitted March 2009.	City of Perris
City of Redlands	Sewer Capital Improvements Project (CIP) pipeline replacement.	Construction began in April 2009. Anticipated for completion in August 2009.	Redlands
City of Redlands	Water CIP pipeline replacement.	Construction scheduled to begin August 2009; 1 year project.	Redlands
City of Redlands	Highline pipeline replacement project	Construction scheduled to begin October 2009; 5 month project.	Redlands
City of Redlands	Country Club #1 Reservoir replacement project	Construction scheduled to begin October 2009; 5 month project.	Redlands
San Bernardino County	Intersection improvement on 5 <sup>th</sup> Avenue	ROW: August 2009 Construction scheduled to begin January 2010.	Mentone
San Bernardino County	San Bernardino Avenue signal installation	Construction scheduled to begin December 2009.	Fontana
San Bernardino County	Rehabilitation and overlay on Alabama Street	Currently in planning phases. Construction dates unknown.	Redlands
San Bernardino County	Garnet Street Bridge Replacement	Construction scheduled to begin April 2011.	Redlands

**SOURCES:**

San Bernardino National Forest Service, Schedule of Proposed Actions, March 2009.  
City of Perris, Capital Improvement Projects List, June 2009.  
City of Redlands, Capital Improvement Program List, June 2009.  
City of Redlands, Status of Major Projects List, December 2008. .  
Caltrans, District 8, Riverside County Projects.  
City of Moreno Valley, Economic Development Activity Summary, May 2009.  
SANBAG, Major Projects: Quarterly Project Status Briefing, January 2009 Through March 2009.  
Riverside County Transportation Commission, 2009.

## 4.3 Cumulative Effects

### Construction Related Impacts

**Impact 4-1: Construction of the proposed project in conjunction with other projects in the area could result in cumulative short-term impacts associated with construction activities. The short-term impacts associated with cumulative construction projects include impacts related to aesthetics, air quality, biological resources, hazardous materials, geology and soils, hydrology and water quality, land use, noise, and public services and utilities, and traffic. Construction-related impacts would be short-term. With measures identified in Chapter 3 to mitigate project impacts, the contribution of the proposed project to most cumulative, construction-related impacts would not be cumulatively considerable. However, the project's contribution to air quality impacts would be cumulatively considerable.**

Construction of Perris Dam Remediation Program is scheduled to begin in 2010 and be completed in 2013. The potential cumulative contribution of the proposed project in conjunction with the other identified projects is discussed below by environmental topic area.

#### Aesthetics

The geographic scope of cumulative aesthetic impacts is the viewsheds affected by construction of Perris Dam Remediation Program. The proposed project in conjunction with other projects in the vicinity would result in short-term visual impacts during construction. Construction activities would require the use of heavy equipment and storage of materials at the construction zone.

During construction, excavated trenches, stockpiled soils, and other materials within the construction easement would constitute negative aesthetic elements in the visual landscape that would affect views of the area. As noted in Chapter 3, the construction-related effects would be temporary and are not considered significant on a project basis.

The dam remediation portion of the proposed project would involve construction of a stability berm that would temporarily impact visual resources at Lake Perris and the surrounding areas. During construction, the haul road, the borrow area, staging areas, and stockpiled soils would directly impact the view from the western shore of the lake. South of the dam, excavation, stockpiled soils, and staging areas could be visible from Ramona Expressway. Large vehicles would be seen moving within the haul roads continually. Cement mixing and injection facilities could be visible from Ramona Expressway. Chain-link fencing, however, would be constructed around construction areas within the Lake Perris SRA to diminish views from the western shore of the lake. Construction activities would be visible for a period of two years. Once construction is complete, these temporary impacts would cease.

As previously stated, due to the temporary nature of the impact and the fact that the area is not within a designated scenic vista or scenic highway corridor, aesthetic impacts would not be considered significant. Considering the short term nature of project construction and the limited scope of views affected, the project's contribution to adverse impacts on visual resources during project construction would not be cumulatively considerable.

## Air Quality

The geographic scope of cumulative air quality impacts is the South Coast Air Basin. Concurrent construction of the project with other projects in the air basin would generate short-term emissions of criteria pollutants and toxic air contaminants, including suspended and inhalable particulate matter and equipment exhaust emissions. Other projects that would contribute to cumulative impacts on air quality are shown in Table 4-1. Implementation of Mitigation Measure 3.2-1 would ensure implementation of the SCAQMD requirements to control fugitive dust at construction sites and other measures to limit construction dust and vehicle and equipment emissions. However, as discussed in Section 3.2, the project nevertheless would exceed SCAQMD significance thresholds for criteria air pollutants, resulting in significant and unavoidable air quality impacts during the short-term duration of construction activities. Because the project construction would exceed significance thresholds established by the SCAQMD for activities and operations within the air basin, its contribution to cumulative air quality impacts would be cumulatively considerable. DWR would be required to prepare a statement of overriding considerations prior to adopting the project for both the direct impact as well as an indirect cumulative impact.

The accumulation of GHGs has been implicated as the driving force in global climate change. Climate change is commonly used interchangeably with “global warming” and the “greenhouse effect.” Definitions vary among regulatory authorities and members of the scientific community, but in general climate change can be described as the changes in the earth’s climate caused by natural fluctuations and anthropogenic activities that alter the composition of the global atmosphere. No project alone would contribute to a noticeable incremental change to the global climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context for GHG emissions, and an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that the cumulative impacts of GHGs, even additions that are relatively small on a global basis, need to be considered. Because of the cumulative nature of the climate change problem, even relatively small contributions may be potentially considerable and therefore, significant.

As described in Section 3.2, the proposed project would not result in a direct significant and unavoidable contribution of GHG. This project would not conflict with the state goal of GHG emission reduction to 1990 levels by 2020. Nonetheless, the project would be considered cumulatively considerable since the project’s emissions combined with regional, state, and global emissions would contribute to conditions that affect the global climate.

## Biological Resources

The geographic scope of this resource area is the open space and undeveloped watershed lands surrounding Lake Perris bounded by the San Jacinto Nuevo and Potrero mountain ranges. Potentially significant biological resource impacts identified in Chapter 3 include impacts on: specified plant communities, open water/Lake Perris, habitats for sensitive species, and impacts to potential nesting birds. Proposed mitigation measures described in Chapter 3 would reduce most of these impacts to a less-than-significant level. The majority of the project impacts would

be temporary, and disturbed areas would be revegetated and habitat restored. As described above, most of the projects listed in Table 4-1 are commercial or utility and transportation infrastructure projects, predominantly located in the urban and developed areas where there are generally fewer sensitive biological resources than in the Lake Perris SRA. Furthermore, the project's impacts to biological resources would be mitigated through the application of the Western Riverside County MSHCP that enables a cumulative approach to habitat conservation. Therefore, the proposed project would not contribute considerably to cumulative biological impacts.

## **Cultural Resources**

The geographic scope of this resource area encompasses the northwest trending Perris and San Jacinto Valleys surrounded by the Bernasconi Hills and the Russell Mountains and immediate vicinity. As described in Chapter 3, the potential exists for cultural resources to be encountered during project construction. Proposed mitigation would provide contingency procedures in the event that cultural resources are encountered; therefore, the project impact would be less than significant. Due to the low likelihood of encountering cultural resources during project construction, the project would not contribute to cumulative cultural resource effects in the Perris and San Jacinto Valleys and immediate vicinity.

## **Geology, Soils, Faulting, and Seismicity**

The geographic scope of potential cumulative impacts related to geology, soils, faulting, and seismicity, encompasses the northwest trending Perris and San Jacinto Valleys surrounded by the Bernasconi Hills and the Russell Mountains and immediate vicinity. As described in Chapter 3, construction of the proposed project would include earthwork activities that could create areas with unstable slopes; exposure of soils to erosion and loss of topsoil during construction activities; and subsidence of native materials. As described in Chapter 3, the construction of the proposed project could create areas with unstable slopes, expose soils to erosion and loss of topsoil during construction activities, and cause subsidence of native soils underneath stockpiled materials; however, these impacts would be mitigated to a less-than-significant level with the implementation of identified measures. Since none of the projects shown in Table 4-1 are located within the area of potential impact, there would be no cumulative geologic or seismic impacts.

## **Hazards and Hazardous Materials**

As described in Chapter 3, the proposed project could expose workers and the public to hazardous materials used during construction or that could be present in excavated soils. However, the project would not increase permanent use of hazardous materials or result in on-site contamination that could contribute to cumulative hazardous waste in the region. The project would not generate hazardous waste requiring disposal at an off-site landfill.

Compliance with PRC regulations governing the use of construction equipment in fire prone areas would mitigate potential wildland fire risks. The project would not add considerably to the potential for wildland fires in the region. Furthermore, remediation of the dam would reduce the potential safety hazard from seismic failure. Therefore, the project would not add considerably to cumulative hazards.

## Hydrology and Water Quality

The geographic scope of potential cumulative water quality impacts encompasses the Santa Ana River, San Jacinto River, and their tributaries and associated drainage areas within the Perris Dam Remediation Program area. As discussed in Chapter 3, construction activities associated with the project could degrade water quality from sedimentation as a result of increased erosion or from the release of fuel or hazardous materials. The other projects listed in Table 4-1 could have similar construction-related impacts on water quality in the project area. Construction activities at other project sites also could increase erosion and subsequent sedimentation, with impacts on water quality as well as storm drain capacity. Cumulative projects also could adversely impact surface water quality through the release of fuels or other hazardous materials, or discharges from excavation dewatering activities, to stream extensions or storm drains. Implementation of Mitigation Measure 3.7-1a requires DWR to prepare and implement a SWPPP that identifies potential pollutant sources and BMPs to reduce pollutants in storm water discharges. Therefore, the contribution of the proposed project to regional water quality would not be cumulatively considerable.

The increase in impervious surface area resulting from the project would be minor; increased runoff as a result of increased impervious surface would not be significant. The other projects listed in Table 4-1 also could contribute to increased runoff due to increases in impervious surfaces to varying degrees. Because the project would result in only a minor increase in impervious surface area, and because drainage facilities at the above-ground facilities would be appropriately designed to accommodate storm water runoff, the project's contribution to cumulative runoff would not be cumulatively considerable.

## Land Use and Planning

The geographic scope of this impact covers the areas Lake Perris, in an unincorporated area of Riverside County, and in the City of Perris. Lake Perris and the area immediately around the lake are owned by DWR and comprise the Lake Perris SRA.

As discussed in Chapter 3, project implementation of the emergency outlet extension alternatives would eliminate a segment of land managed for habitat conservation values by CDFG. In addition, a 300-foot corridor of the Perris Fairgrounds would be decommissioned by the construction of either alternative. This area is comprised of a large general parking area, facilities for El Toro Huaco Rodeo, and Starwest Motocross Park. Although consistent with local zoning, construction of the proposed outlet extension would encroach into Fairgrounds and alter the land use. Implementation of the underground emergency outlet extension would alter this land use temporarily, while implementation of the aboveground emergency outlet extension would alter this land use permanently. The facilities affected by the outlet extension corridor could not be re-located on the Fairgrounds. Most of the projects listed in Table 4-1 are commercial or utility and transportation infrastructure projects, predominantly located in the urban and developed areas to the north and south of the project area; therefore, the project's contribution to cumulative land use impacts would not be considered significant.

## Noise

The geographic scope of potential cumulative noise vibration impacts encompasses the proposed construction sites and immediate vicinity (within the range of audible noise from the facilities during construction and operation) as well as along the access and haul routes to the construction site.

The project would result in intermittent and temporary noise above existing ambient noise levels due to construction activities in the project vicinity. With implementation of mitigation measures, the project's daytime and nighttime noise would be considered a significant and unavoidable direct impact of the project. While there is the potential for the proposed project to contribute to construction noise levels generated by the cumulative projects listed in Table 4-1, the actual schedule and timing of construction activities is uncertain. DWR would coordinate with the appropriate departments of the neighboring jurisdictions and with other utility districts and agencies regarding the schedule and timing of construction projects that would occur near the Perris dam site. With early and ongoing coordination, DWR would avoid conflicts with other projects to the extent possible, and the project's contribution to cumulative construction noise impacts, as mitigated, would not be considered significant.

## Public Services and Utilities

As described in Chapter 3, construction of the proposed Perris Dam upgrades could result in significant project impacts associated with the planned or accidental disruption of utility services, potential temporary increased demand for police and fire department services, and increased demand on waste disposal facilities. Construction activities associated with many of the projects listed in Table 4-1 also could result in the disruption of utilities service or temporarily increase the demand for public services. Prior to construction, DWR would conduct an underground utilities search that would contact local utilities, including the Fairgrounds, to determine the location of known utilities. As part of the project, the utilities would be avoided or rerouted during construction to maintain services. If temporary service interruptions are necessary, DWR would coordinate with the local land uses affected to minimize the temporary nuisance. Services would be restored as soon as possible. Implementation of these measures would ensure that the project's contribution to cumulative impacts on public services and utilities would not be cumulatively considerable.

## Recreation

Recreational activities would be impacted due to ongoing construction noise, air quality and aesthetic issues. In addition, construction would result in temporary closure of some recreational facilities. However, implementation of the mitigation measures described in Chapter 3 would reduce these temporary impacts to a less than significant level. The cumulative impact of the projects in Table 4-1 on recreational facilities in the project region is unknown. The increased residential development in the area would increase local demand for recreational facilities. Restoring the Lake Perris SRA to pre-drawdown conditions would assist in accommodating the recreational demand. None of the projects listed would directly affect recreation resources in this area; therefore, the proposed project would not result in cumulative impacts to recreation resources.

## Traffic

The geographic scope of this impact area lies within unincorporated Western Riverside County. The roadway network on which construction workers and construction vehicles (including trucks that would transport equipment and fill material to and from the worksite) would travel to access the site consists of regional highways and local roadways.

As described in Chapter 3, the proposed project would result in short-term increases in vehicle trips, reduced access to and parking at adjacent land uses, increased potential for traffic safety conflicts, and increased wear-and-tear on designated haul routes. While the project impacts would be reduced to a less-than-significant level with implementation of proposed mitigation measures, the project could contribute to cumulative traffic and circulation impacts when considered in combination with projects listed in Table 4-1.

Potential cumulative traffic impacts could occur as a result of: (1) projects that would generate increased traffic at the same time on the same roads as the proposed project, causing increased congestion and delays, and (2) infrastructure projects in roads that would be used by the proposed project construction workers and trucks, which could delay project-generated vehicles traveling past the work zones of the other projects. In addition to cumulative (additive) effects on traffic flow conditions, the proposed project and other cumulative projects would extend the period of time when there would be disruptions (albeit not all disruptions would be significant) to traffic flow on area roadways.

The proposed project would not add a significant number of truck trips to local roadways. Most of the truck trips would occur within the Lake Perris SRA. DWR would coordinate with the surrounding jurisdictions and with other utility districts and agencies regarding the timing of construction projects that would occur near the Perris Dam upgrade. Such coordination would help to minimize multiple disruptions in the same areas. DWR would also submit plans related to, and comply with the requirements of, encroachment permits with local jurisdictions, which would provide further opportunities to coordinate multiple projects. Specific measures to mitigate significant impacts would be determined as part of the interagency coordination.